FM/AM STEREO RECEIVER

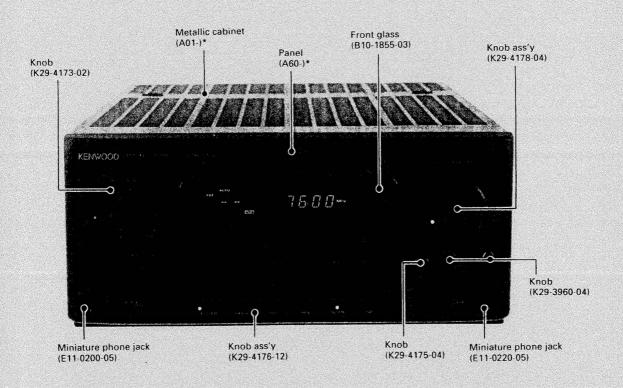
A-522/522L SERVICE MANUAL

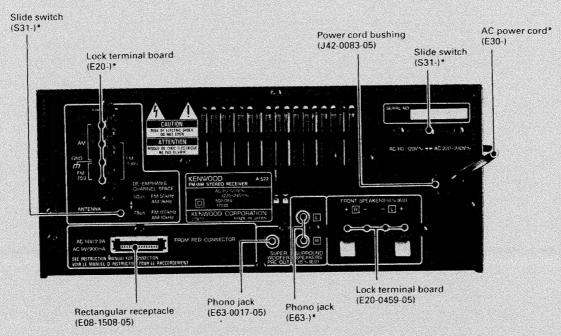
COMPACT HIFI SYSTEM
UD COMPONENT SYSTEM

UD-70)

KENWOOD

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A-522 : K, P, Y, M, X type A-522L : T, E, L type * Refer to parts list on page 33. Photo is A-522

Refer to the SERVICING NOTES on page 2 before repair.

CONTENTS/SERVICING NOTES

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SERVICING NOTES

① This unit does not contain a selector IC. Since each speaker relay of this unit is operated according to the data that is serially transmitted from the graphic equalizer (GE-522), the receiver cannot output sound alone. To output a signal to each speaker terminal, follow the following procedures.

Procedure 1)

Direct the tuner output to the main amplifier input. Connect the test pin on the right (lower right of the tuner board) of the main amplifier board (X09, A/7). (Fig. 1)

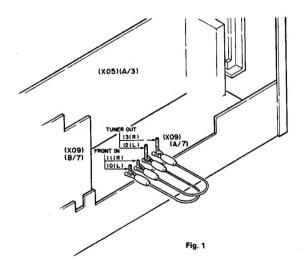
Front amplifier

Pins 12 and 10 (Left channel)
Pins 13 and 11 (Right channel)

Procedure 2)

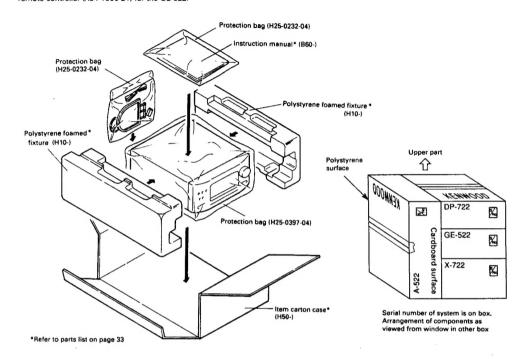
Enter the test mode. (Hold down the CHARACTER key, and insert the AC plug into the outlet.)

- Press the DAT key or DBS/LD key. (Only the front speaker outputs sound.)
- Press the VIDEO key. (The surround mode is entered, and the front and surround speakers outputs sound.)

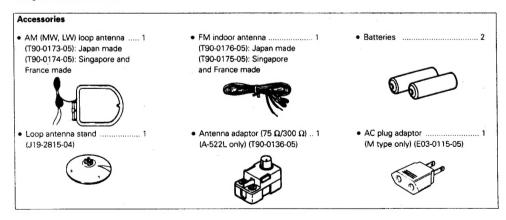


PACKING/ACCESSORIES

The A-522/522L is supplied with all the accessories, except the remote controller (X94-1000-21) for the GE-522.



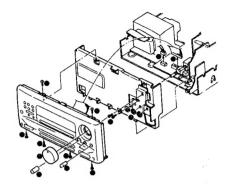
The sleeve method is K, P, Y, M types, and E, X, T, L types are corrugated fiberboard boxes.



DISASSEMBLY FOR REPAIR

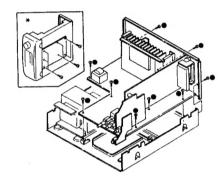
Removing the front panel and sub panel

- Remove the four knobs
- 2. Remove the six screws .
- Disconnect the two connectors , then remove the front
- 3. Remove the two screws and three nuts , then remove the sub panel



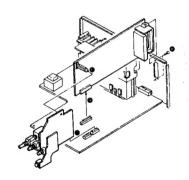
Removing the main PC board (X09: A/7)

- 4. Remove the nine screws, then remove the main PC board (X09: A/7).
 - * To adjust the main PC board, cover, as shown in the figure.



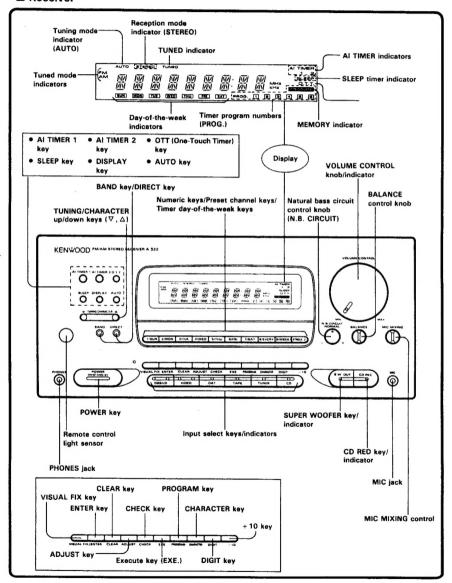
Removing the tuner PC board (X05: A/3) and the volume PC boards (X09: B/7, C/7, D/7)

- 5. Remove the unit holder 6.
- 6. Disconnect the volume PC boards (X09: B/7, C/7, D/7) from connector.
- 7. Remove the two screws .
- 8. Disconnect the tuner PC board (X05: A/3) from connector

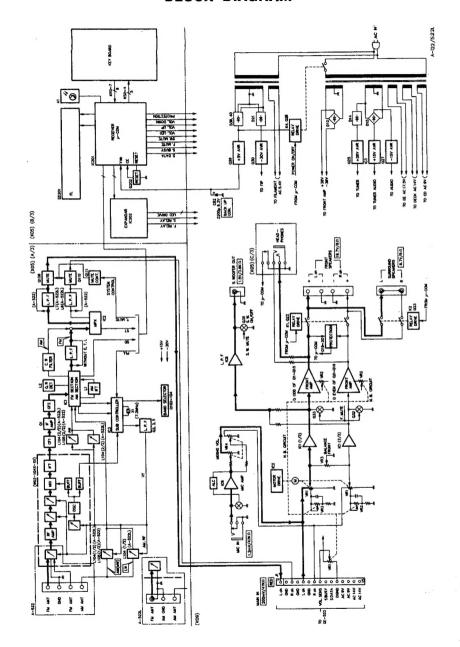


Controls and indicators

■ Receiver

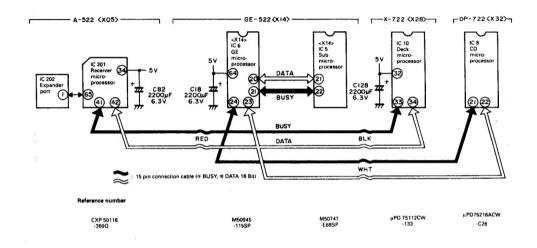


BLOCK DIAGRAM



CIRCUIT DESCRIPTION

Microprocessor and back-up condenser of this unit (16-bit serial transmission is supported unlike the UD-7/9 series (8 bits).)



Microprocessor initialization (reset) and test mode

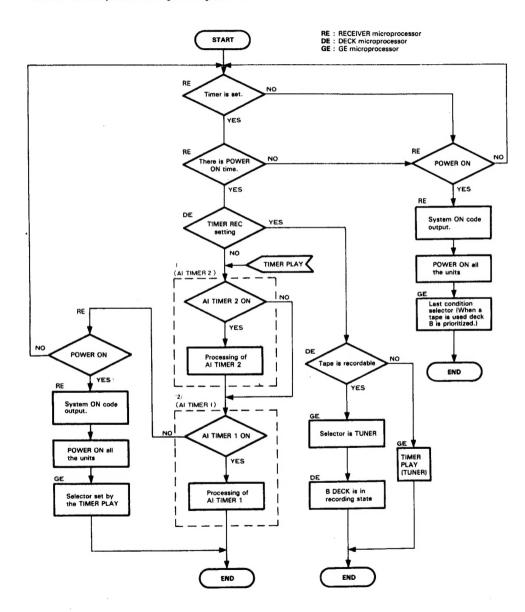
		A-522	GE-522	X-722	DP-722
		RECEIVER microprocessor (X09) IC201 CXP50116-360Q	GE microprocessor Mein (X14) ICS 8ub (X14) IC5 M50945-115SP M50747-E8SSP	DECK microprocessor (X28) IC10 µPD75112CW-133	CD microprocessor (X32) IC8 #PD75216ACW-C26
Backup condenser Initialization (reset)		(X05) C82 2200 μF 6.3 V	(X14) C18 2200 μF 6.3 V	(X28) C128 2200 μF 6.3 V	None
		Hold down the ENTER key, and insert the AC plug into the outlet.	Hold down the MEMORY key, and turn AC on.		
Test mode	Operation	Hold down the CHARACTER key, and insert the AC plug into the outlet.	Selector test: Hold down the EFFECT key, and turn AC on. FL all lit test: Hold down the FLAT key, and turn AC on. Segment test: Hold down the R/M key, and turn AC on.	Short test pin ⑤ 七十⑥, and turn AC on.	See the DP-711 service manual.
	Release	Remove the AC plug from the outlet.	Release — AC off.	Press the PAUSE key.	
	Contents	All fluorescent displays lig For details, see the service	ght. se manual for each model.	No fluorescent display.	

A-522/522L

CIRCUIT DESCRIPTION

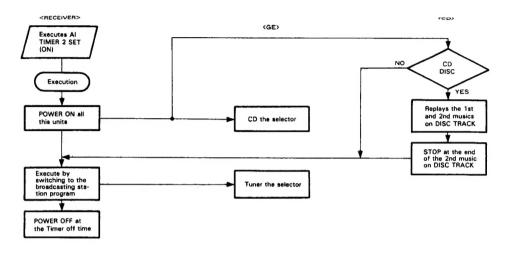
Operation of UD-70 system

The flow chart from power on through sound generation

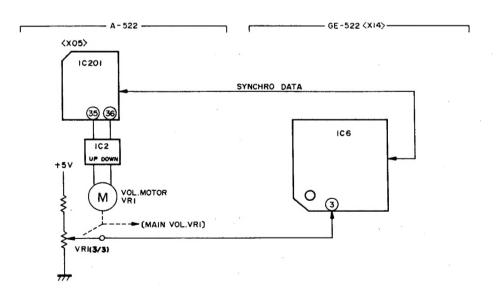


CIRCUIT DESCRIPTION

① Flow chart of AI TIMER 2



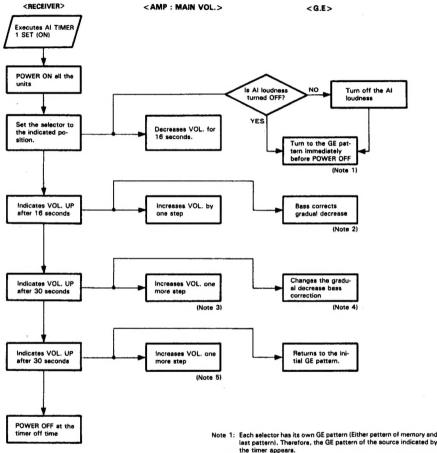
Operation of Al TIMER 2



A-522/522L

CIRCUIT DESCRIPTION

2 Indication flow of Al TIMER 1



- last pattern). Therefore, the GE pattern of the source indicated by
- Note 2: Shifts to the pattern which has the loudness effect (There are two patterns of the gradual decrease bass correction of Al TIMER 1).
- Note 3: The three steps of increase volume can be selected.
- Note 4: Decrease correction volume is lowered in accordance with VR UP.
- Note 5: Same as Note 3. However, the VR position is limited at the position of 12.

CIRCUIT DESCRIPTION

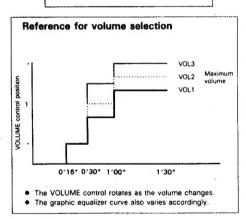
Function description

a) AI TIMER 1

- · With the program timer mode set to PLAY, when the timer is turned ON, the setting contents for the AI TIMER 1 is activated if the Al TIMER 1 is set to ON (the FL indicator is lit).
- When the Al TIMER 1 is turned ON, first playback starts with the minimum volume level, then the volume level is increased in three steps.
- The third-step volume level (the maximum volume level) can be selected among the three types of the volume levels (VOL. 1-3). Each time the AI TIMER 1 key is pressed, the maximum volume level is changed in order from VOL. 1 to .VOL. 3 and TIMER OFF setting cyclically.
- 1) When the key is pressed with the AI TIMER 1 is OFF (FL indicator is not lit):

(2) When the key is pressed in the volume setting mode (FL indicator is lit): Example: When VOL, 2 is selected

→ VOL. 2 → VOL. 3 → OFF → VOL. 1



b) AI TIMER 2

- With the program timer mode set to PLAY, when the timer is turned ON, the setting contents for the AI TIMER 2 is activated if the Al TIMER 2 is set to ON (FL indicator is lit).
- . When the Al TIMER 2 is turned ON, if the disc is loaded in the CD player, the two tracks on the disc is played regardless whether the other source is set for play.
- Then, the playback source is changed to tuner automat-
- · Each time the Al TIMER 2 key is pressed, the timer setting is changed alternately

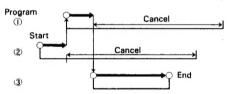
Timer program operation

< When the program settings are registered within the same

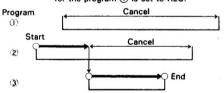
When the two or more program settings are to be started at the same time:

- The program having the least number is activated and others
- will be cancelled.
- When the setting time for two or more programs differ: First, the program with the earliest setting time is activated. Then, if the same mode (REC mode or PLAY mode) has been designated for the other program, the operation is changed to the program in which the same mode as the first one is designated and the end time for the above program will be cancelled. If another mode is set for of other programs, the contents will be cancelled.

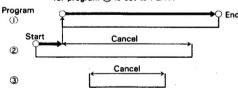
Example 1: When the operation modes for all three programs are set to PLAY:



Example 2: When the operation modes for programs (2), (3) are set to PLAY and that for the program (1) is set to REC:



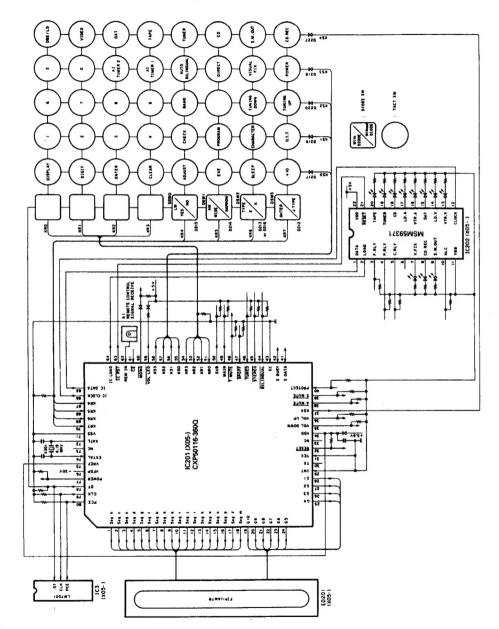
Example 3: When the operation mode for programs (1), (2) are set to REC and that for program (3) is set to PLAY:



The program end is determined by the OFF time of the program which is activated at the last.

CIRCUIT DESCRIPTION

Block diagram of surrounding microprocessor



CIRCUIT DESCRIPTION

Function initial setting

(1) Tuner section

1 OTTEN	Oll
BAND	FM
Last frequency	Lower most limit of each band
Last preset	"" display
Preset memory	Test frequency of each memory
AUTO/MONO	AUTO
BILINGUAL	BOTH MODE
Display mode	POWER ON Frequency displa
	POWER OFF Clock display

OFF

(2) Clock, calendar, and timer section

Calendar	January 1, 1991	
Clock	0:00 Power fa	ilure mode
Programmable timer	Day of week	: TUE
	ON	: 0:00
	OFF	: 0:00
	MODE	: PLAY
	SOURCE	: TUNER
	SET ch	: 01 ch
	Execution mode	: OFF
Sleep timer	OFF	
One touch timer	OFF	

(3) Amplifier section

Selector	Audio system	: TUNER
	Video system	: LD
V-FIX	OFF	
CDREC	OFF	
SUPER WOOFER	OFF	

Setting of initial conditions (reset)

(1) Method

While pressing ENTER key, turn the AC ON.

(2) Contents

Clears all the memory and returns to the initial conditions. However, the test frequency is newly memorized in the preset memory at this time. (The same as when the back-up data is NG.)

(1) Setting method

Test mode

While pressing CHARACTER key, turn the AC on.

(2) Clearing method

AC off.

- · All fluorescent lamps and LEDs light.
- Speaker relay ON/OFF. (The front and surround speakers output sounds)
- · Receive the minimum FM value.

The test is performed with the following keys.

1) Preset channel calling

Normally, the +10 key changes the high-order digits 1-, 2-, and 0- alternately, but it changes the high-order digits 1- and 0- alternately in the test mode. The 0 key does not call any channel, but in the test mode, if the high-order digit is 0, 10 ch is called, and if it is 1, 20 ch is called. Table 1 lists the channels to be called.

Table 1

Low order	TEN KEY									
High order order	1	2	3	4	5	6	7	8	9	0
0	1	2	3	4	5	6	7	8	9	10
1	11	12	13	14	15	16	17	18	19	20

2) Motor volume test

If the DIGIT key is pressed, the volume keeps increasing for 16 seconds, and then keeps decreasing for 16 seconds. To stop the test in the middle, switch the power off.

3) O.T.T key test (one-touch-timer)

Normally, the O.T.T key is not accepted if the clock is not functioning. Only in the test mode, it is indicated that the key is accepted, but it does not cause any operation. When the key is pressed the first time, ON 0:30 O.T.T appears on the fluorescent display, and after five seconds, only O.T.T is displayed. When the key is pressed the second time, O.T.T disappears, and the original state before the key is pressed returns.

Conditions by destination

Desti- nation type		Destination switches (DSW)			OSW)			Inter-channel	Intermediate	PLL reference
		В3	B2	B1	В0	Band	Receiving frequency range	space	trequency	frequency
	M, Y	1	1 or 0	0		FM	87.5 ~ 108.0 MHz	50 kHz /100 kHz	+10.7 MHz	50 kHz (25 kHz)
	1		7 01 0		0	AM	531 ~ 1602 kHz /530 ~ 1610 kHz	9 kHz /10 kHz	+450 kHz	10 kHz
A-522	K, P	1	0	0	0	FM	87.5 ~ 108.0 MHz	100 kHz	+10.7 MHz	50 kHz (25 kHz)
						AM	530 ~ 1610 kHz	10 kHz	+450 kHz	10 kHz
	X 1 1 0	1	0		0	FM	87.5 ~ 108.0 MHz	50 kHz	+10.7 MHz	50 kHz (25 kHz)
						AM	531 ~ 1602 kHz	9 kHz	+450 kHz	9 kHz
77					1	FM	87.5 ~ 108.0 MHz	50 kHz	+10.7 MHz	50 kHz (25 kHz)
A-522L	T, E, L	1	1	0		MW	531 ~ 1602 kHz	9 kHz	+450 kHz	9 kHz
						LM	153 ~ 281 kHz	1 kHz	+450 kHz	1 kHz

A-522/522L

CIRCUIT DESCRIPTION

Microprocessor: CXP50116-360Q (X05: IC201)

Pin functions

Pin No.	Pin name	1/0	Name	Description	
1 ~ 18	S4 ~ S21/PG0 ~ PG3 PK0 ~ PK3, PJ0 ~ PJ3 T15 ~ T10	0	Segment	Segment (h, c, e, d, g, f, b, a, q, r, j, i, k, n, o, p, l, m)	
19 ~ 28	S22, S23/T9, T8, T7 - T0	0	G10 ~ G1	Grid 10 ~ 1	
29 ~ 31	INT, TX, TEX		INT, TX, TEX	No used.	
32	RST	1	RESET	Reset pin	Low: RESET High: NORMAL
33	NC		NC	No used.	
34	Vdd		Vdd	+5 V power supply	
35	PIO	0	VOLD	Motor volume down	Low: STOP High: ACTIVE
36	PI1	0	VOLU	Motor volume up	Low: STOP High: ACTIVE
37	PI2	0	KS4	Key scan signal output (KS4)	
38	PI3	0	AMUTE	Amplifier mute	Low: ON High: OFF
39	PB0	0	SMUTE	Super woofer mute	Low: ON High: OFF
40	PB1	ı	PROTECT	Protection detection	Low: OFF High: ON
41	PB2	1/0	SDATA	Serial communication DATA	
42	P83	1/0	SBUSY	Serial communication BUSY	
43	EC		EC	No used.	
44	PX0	1	BILINGUAL	TV bilingual signal detection	Low: BILINGUA High: NORMAL
45	PX1	1	STEREO	Stereo signal detection	Low: STEREO High: MONAUR
46	PX2	1	TUNED	SD signal detection	Low: TUNED High: OFF
47	PA0	ı	SPOFF	Head phone use detection	Low: Use High: No use
48	PA1	0	TMUTE	Tuner mute	Low: OFF High: ON
49	PA2	0	MAIN	TV main selection signal output	•
50	PA3	0	SUB	TV sub selection signal output	
51 ~ 54	PF0 ~ PF3	1	KR0 ~ KR3	Key return signal input (KR0 ~ KR3)	
55 ~ 58	PEO ~ PE3	0	KS0 ~ KS3	Key scan signal output (KS0 ~ KS3)	
59	PY0	0	VOLLED	Volume LED drive	Low: ON High: OFF
60	PY1	0	MONO	Forced monaural output	Low: ON High: OFF
61	PY2	1	CE	Chip enable signal input	Low: OFF High: ON
62	PY3	1	REMIN	Remote control signal input	
63	PD0	0	ICRST	Expansion port IC (MSM59371RS) RESET	
64	PD1	0	ICLOAD	Expansion port IC (MSM59371RS) STROBE	
65	PD2	0	ICDATA	Expansion port IC (MSM59371RS) DATA	
66	PD3	0	ICCLOCK	Expansion port IC (MSM59371RS) CLOCK	
67 ~ 70	PC0 ~ PC3	1	KR4 ~ KR7	Key return signal input (KR4 ~ KR7)	
71	Vss		Vss	GND	
72	XTAL		XTAL	Crystal oscillator input (4.19 MHz)	
73	NC		NC	No used.	
74	EXTAL		EXTAL	Crystal oscillator input (4.19 MHz)	
75	Vref		Vref	No used.	
76	Vfdp		Vfdp	-30 V power supply.	
77	SO/PHO	0	POWER	Power ON/OFF signal output	Low: OFF High: ON
78	S1/PH1	0	DT	PLL IC (LM7001) DATA	
79	S2/PH2	0	CLK	PLL IC (LM7001) CLOCK	
80	S3/PH3	0	PCE	PLL IC (LM7001) STROBE	

CIRCUIT DESCRIPTION

Test frequency

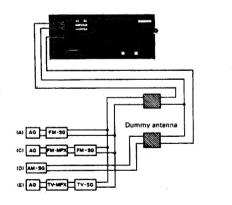
TYPE				A-522L				
СН		Y.M		K.P		Y.M.X		T.E.L
1	FM	98.0MHz	FM	98.0MHz	FM	98.0MHz	FM	98.0MHz
2	FM	108.0MHz	FM	108.0MHz	FM	108.0MHz	FM	108.0MHz
- 3	AM	630KHz	AM	630KHz	AM	630KHz	AM	630KHz
4	AM	990KHz	AM	990KHz	AM	990KHz	AM	990KHz
5	AM	1440KHz	AM	1440KHz	AM	1440KHz	AM	1440KHz
- 6	AM	1610KHz	AM	1610KHz	AM	1602KHz	AM	1602KHz
7	FM	87.5MHz	AM	1700KHz	FM	87.5MHz	LW	162KHz
8	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz	LW	216KHz
9	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz	LW	270KHz
10	FM	89.1MHz	FM	89.1MHz	FM	89.1MHz	FM	89.1MHz
11	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz	LW	280KHz
12	FM	90.0MHz	FM	90.0MHz	FM	90.0MHz	FM	90.0MHz
13	FM	106.0MHz	FM	106.0MHz	FM	106.0MHz	FM	106.0MHz
14	AM	530KHz	AM	530KHz	AM	531 KHz	AM	531KHz
15	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz	LW	153KHz
16~20	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz	FM	87.5MHz

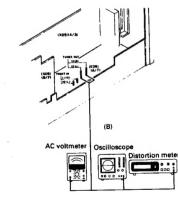
Expansion port IC: MSM59371 (X05: IC202)
Pin functions

Pin No.	Pin name	1/0	Name	Description	
1	DATA	- 1	ICDATA	DATA input	
2	LOAD	1	ICLOAD	Strobe input	
3	016	0	F. RLY	Front speaker relay	Low: OF High: ON
4	015	0	P. RLY	Presence speaker relay	Low: OF High: ON
5	014	0	C.RLY	Center and surround speaker relay	Low: OF High: ON
6	013	0		No used.	
7	012	0	VFIX	V-FIX LED drive	Low: OF High: ON
8	011	0	CDREC	CD REC LED drive	Low: OF High: ON
9	010	0	S.W.OUT	SUPER WOOFER LED drive	Low: OF High: ON
10	09	0	ALC	ALC signal output	Low: OF High: ON
11	Vbb		Vbb	GND	
12	CLOCK	- 1	ICCLOCK	Clock input	
13	08	0	VTR.V	Selector VIDEO (V) LED drive	Low: OF High: ON
14	07	. 0	LD.V	Selector LD (V) LED drive	Low: OF High: ON
15	06	0	DAT	Selector DAT LED drive	Low: OF High: ON
16	05	0	VTR.A	Selector VIDEO (A) LED drive	Low: OF High: ON
17	04	0	LD.A	Selector LD (A) LED drive	Low: OF High: ON
18	03	0	CD	Selector CD LED drive	Low: OF High: ON
19	02	0	TUNER	Selector TUNER LED drive	Low: OF High: ON
20	01	0	TAPE	Selector TAPE LED drive	Low: OF High: ON
21	RESET	1	ICRST	Reset signal input	
22	Vdd		Vdd	+5 V power supply	

ADJUSTMENT

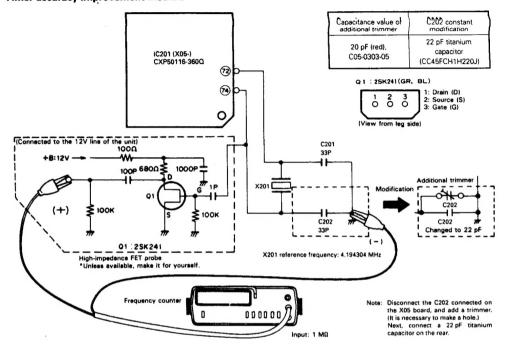
		INPUT	OUTPUT	TUNER	ALIGNMENT		
No.	ITEM	SETTINGS	SETTINGS	SETTINGS	POINTS	ALIGN FOR	FIG
F M	SECTION	1	SELECTOR: FM				
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, 175kHz dev (K,P,N,Y,X type) 1kHz, 140kHz dev (E,T,L,N,Y type) 60dBu (ART input)	Connect a DC voltmeter between TP3 and TP4. (X05-)	AUTO or MONO 98.0MHz	L2 (X05-)	Q¥	(a)
2	VCO	(A) 98.0MHz 0 dev 60dBµ (ANT input)	Connect a frequency counter to TP5 and TP6 (GND). (X05~)	AUTO 98.0MHz	YR2 (X05-)	19.00kHz	(b)
3	DISTORTION (STEREO)	(C) 98.0MHz 1kHz.±68.25kHz dev (K.P.M.Y.X type) 1kHz.±40kHz dev Pilot:±6kHz dev (E.T.L.M.Y type) 60dBu (ART input)	(B)	MONO 98.0MH2	IFT (¶02-)	Winisus distortion	
4	SEPARATION (E.T.L type only)	(C) 98.0MHz 1kHz,±40kHz dev Pilot ±6kHz dev Selector:L or R 60dBµ (ANT input)	(B)	AUTO 98.0MHz	YR4 (X05-)	Minimum crosetalk	
5	TUNING LEVEL	(A) 98.0MHz 1kHz,175kHz dev (K,P,M,Y,X type) 1kHz,145kHz dev (E,T,L,M,Y type) 14dBµ(ANT input) 75(18dBµ(ANT input)3000		AUTO OF MONO 98.0MHz	YR1 (X05-)	Adjust YR1 and stop at the point where ED201(TUMED) goes on.	
Αħ	(MW) SE	LECTION	SELECTOR: AN(NV)				
(1)	T	(D) 1008kHz 400Hz,30% mod 26dBµ(ANT input)	(B)	1008kHz	YR3 (X05-)	Adjust YR3 and stop at the point where ED201 (TUMED) goes on.	





ADJUSTMENT

Timer accuracy improvement method



The timer accuracy is within ±40 seconds for one month as a standard. For improved timer accuracy, perform the following procedure:

- If the timer accuracy is without the standard, replace X201 (L77-1176-05) near the microprocessor IC on a printed board (X05-).
- (2) Even if within the standard, for further improved accuracy, change the constant of C202 in the crystal oscillation circuit of microprocessor IC201 and add a trimmer.

Adjustment method (Use a high-impedance buffer to avoid frequency deviation.)

Connect a high-accuracy frequency counter to pin 74 by way of the FET probe shown above, and adjust the frequency fully up to the first digit of the X201 reference frequency 4,194,304 Hz. (Connect the negative (–) side of the frequency counter to the GND side of C202.)

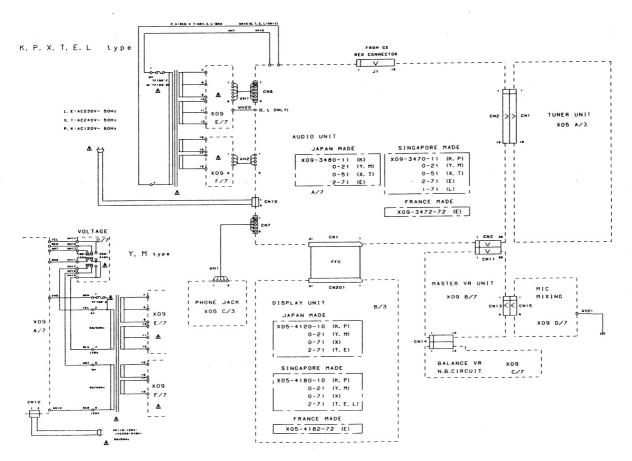
Note (a) As regards the positive (+) side of the frequency counter, arrange as short a distance as possible between pin 74 of IC201 and 1P of the input stage of the FET probe.

- Note (b) Perform the trimmer adjustment after energization of around 10 minutes at normal temperature.
- (3) Monthly error calculation method For example, when the result of measurement at pin 74 by the frequency counter is fx = 4,194,275 Hz... (Reference frequency fo = 4,194,304 [Hz])

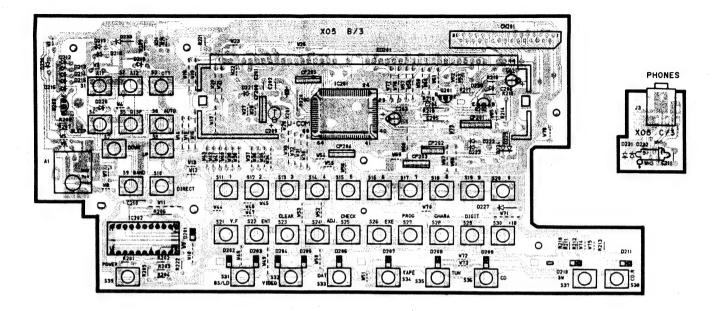
Monthly error [sec] = $\frac{fx - fo}{fo}$ x the number of seconds

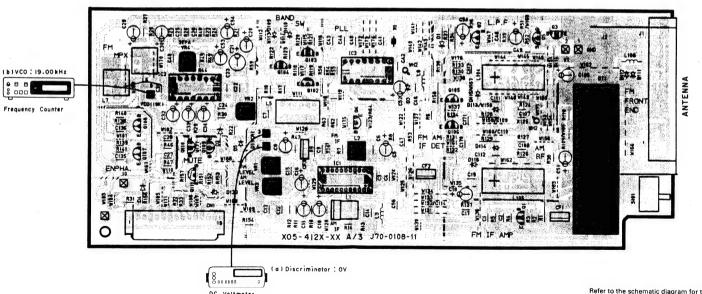
taken for one month $= \frac{4,194,275-4,194,304}{4,194,304} \times (60 \times 60 \times 24 \times 30)$ = -17.9 [sec]

* A minus value as the monthly error means a loss.



PC BOARD (Component side view)

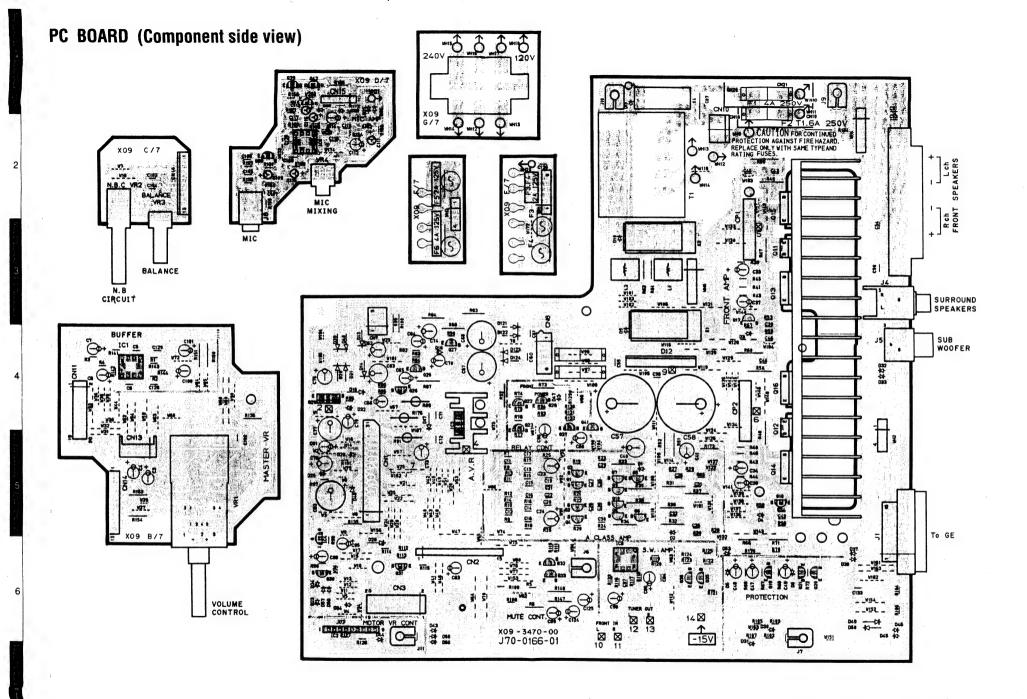


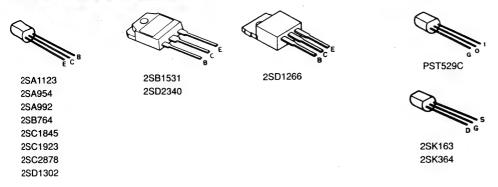


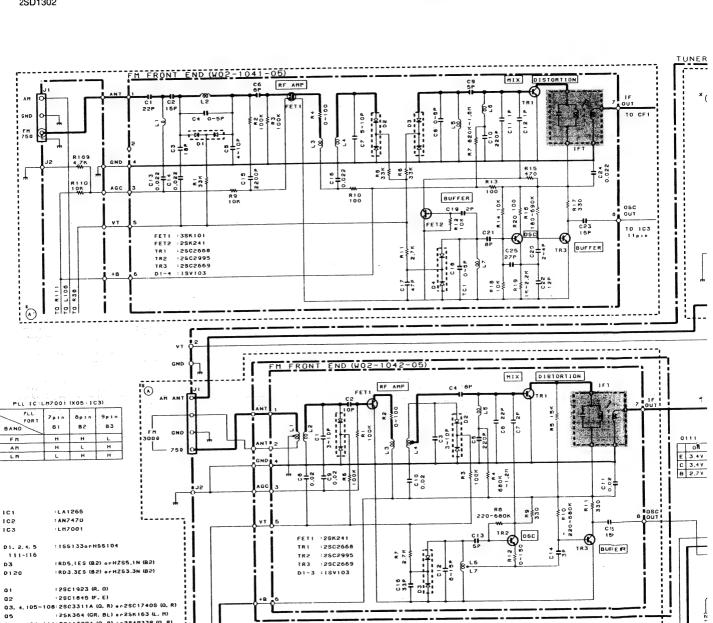
Refer to the schematic diagram for the values of registers and capacitors.

19

20







DTC124

2SA9335

2SC1740

CAUTION: For continued safety, replace safety critical components only with manufacture's recommended parts (refer to parts list). \triangle Indicates safety critical components. To reduce the risk of electric shock, components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

:25K364 (GR, BL) or25K163 (L. H)
11:25A1309A (Q. R) or25A9338 (Q. R)
:25D1302 (S. T)

— SIGNAL LINE — GND LINE — (+B) LINE

0102-104. 0109,110

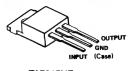


2SA933S 2SC1740S







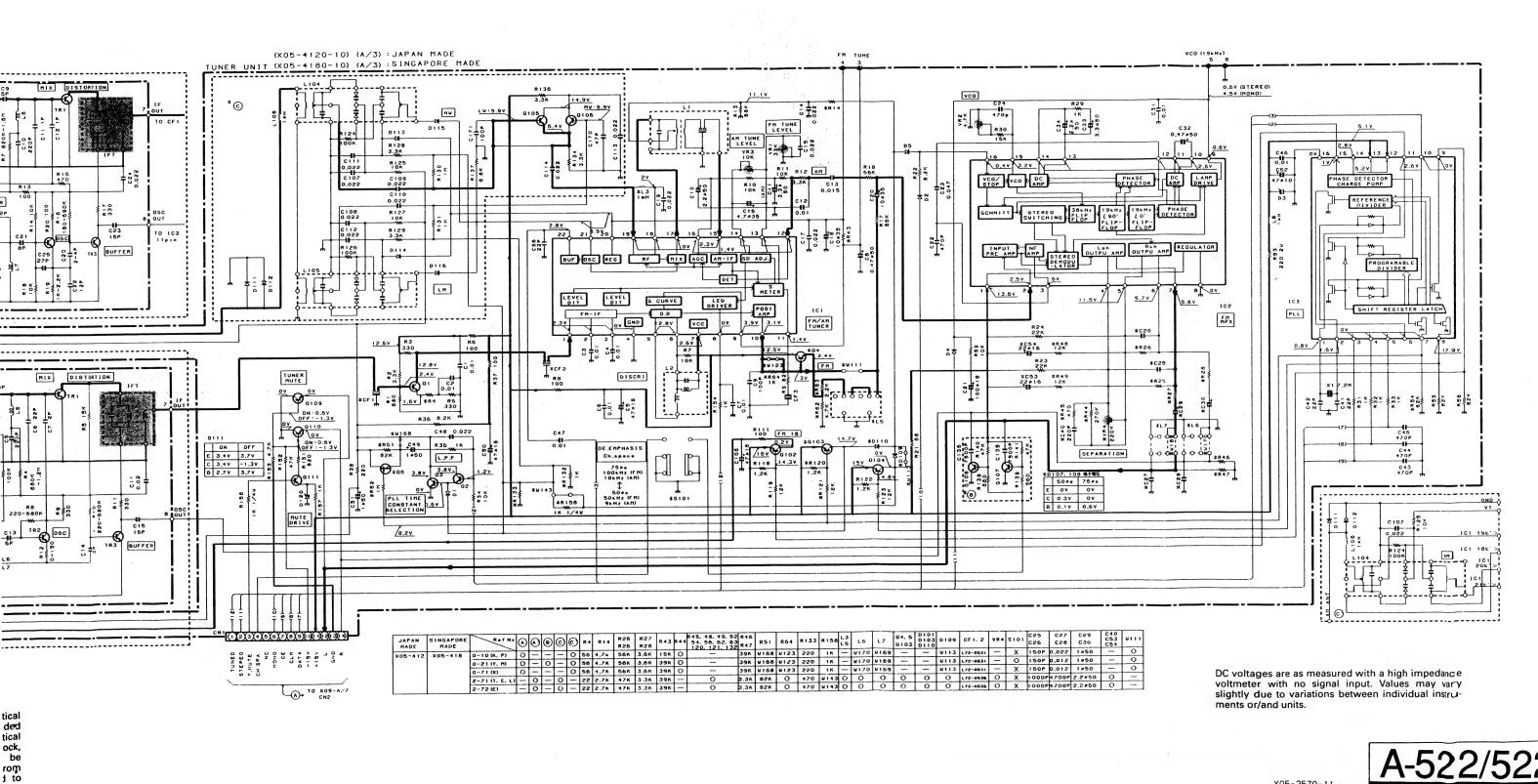




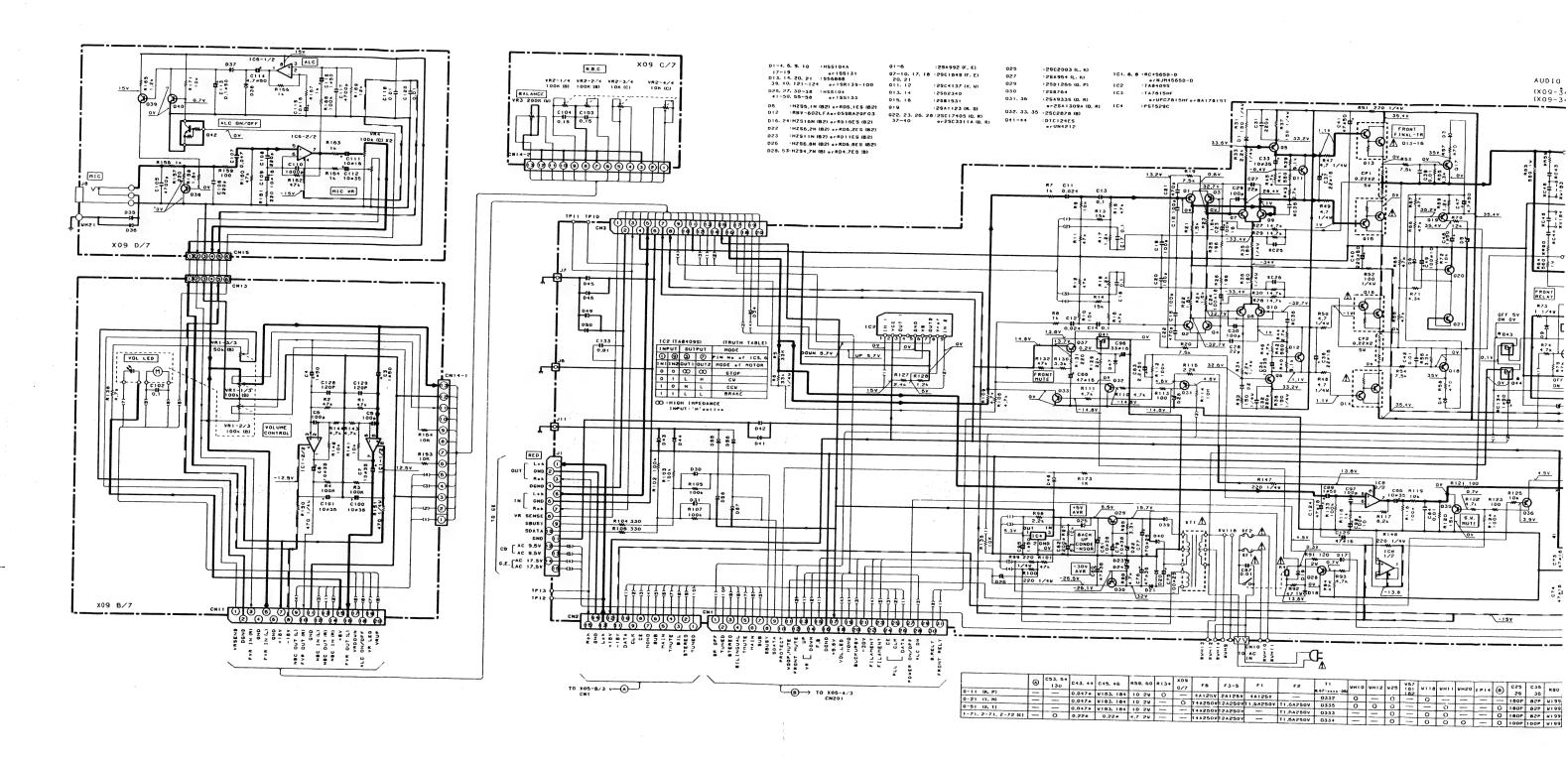




UN4212 LA1265 TA7815HF 2SC4137 LM7001 RC4565D-D BA17815T 2SA1309A NJM4565D-D TA8409S UPC7815HF AN7470 2SC3311A

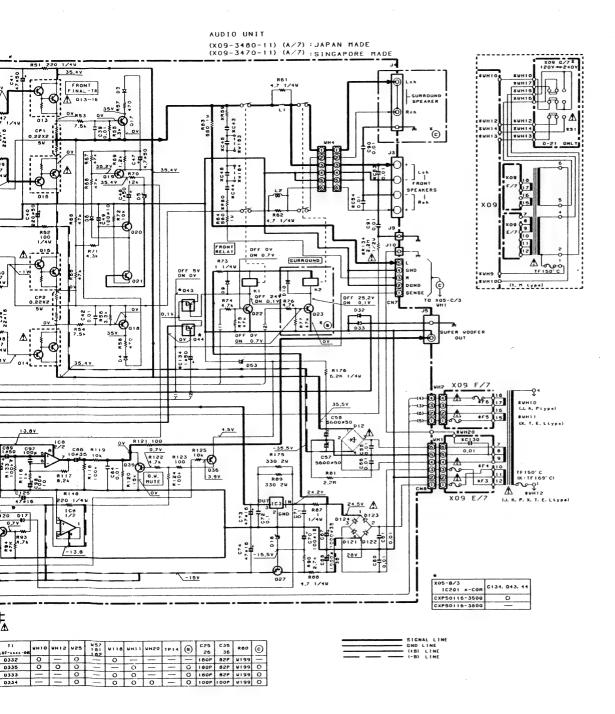


A-522/52: KENWOO



CAUTION: For continued safety, replace safety critical components only with manufacture's recommended parts (refer to parts list). \triangle Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as m voltmeter with no s slightly due to variat ments or/and units.

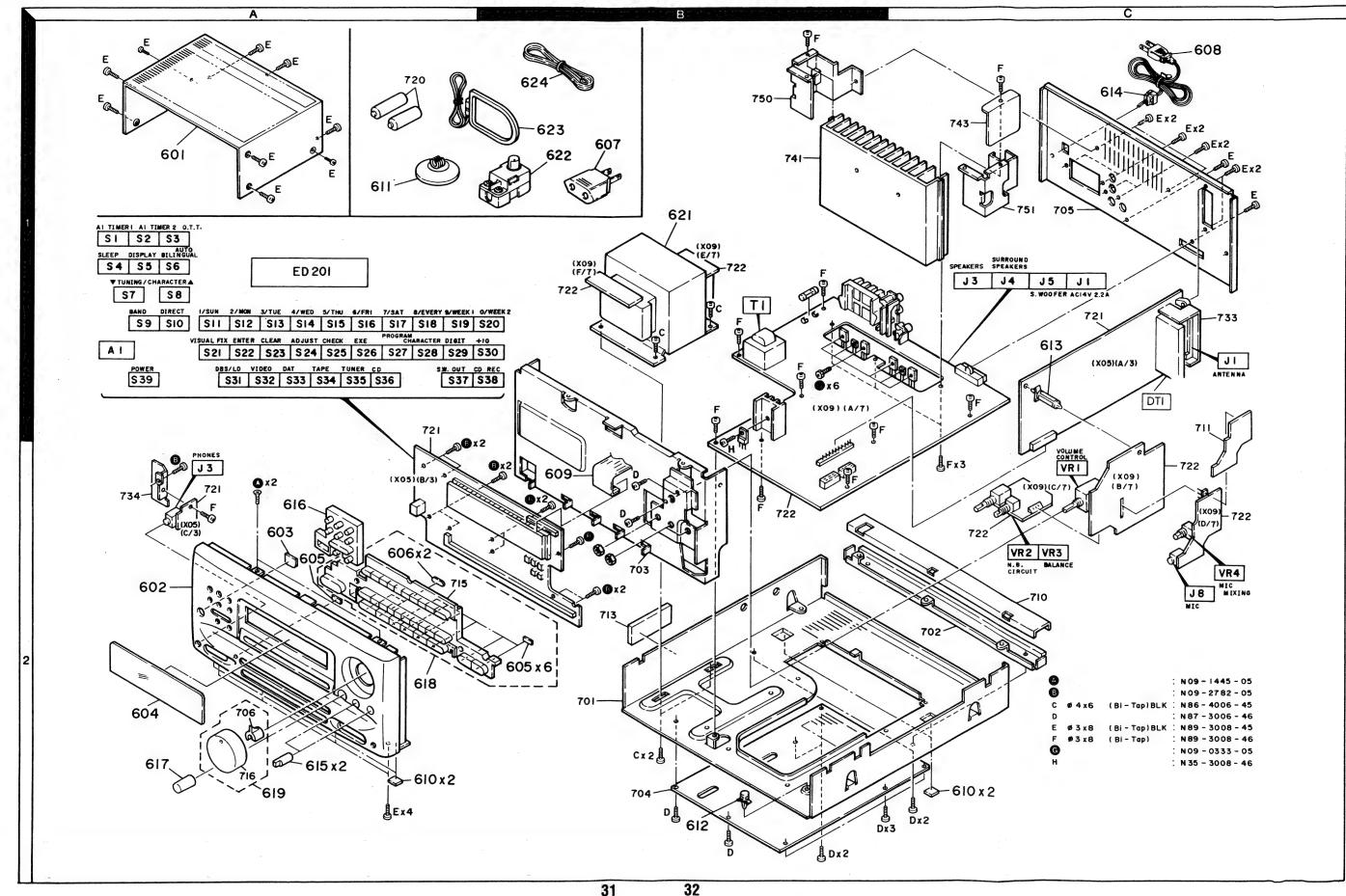


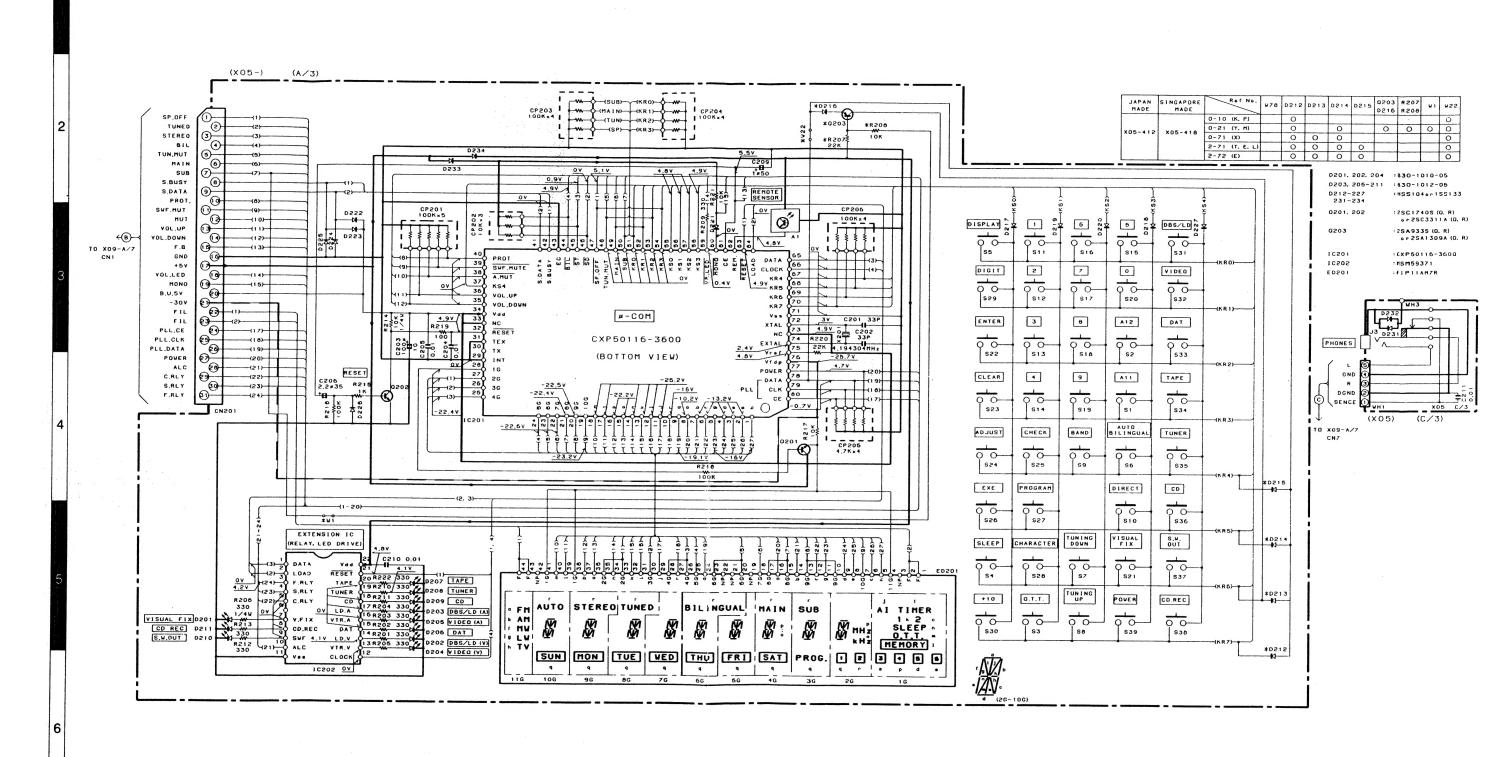
DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.



A-522/522L A-522/522L

EXPLODED VIEW





CAUTION: For continued safety, replace safety critical components only with manufacture's recommended parts (refer to parts list). \triangle Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units



Mew Parts
 Parts No. are not supplied.
 On any other part mentionings gard to Parts No. no soft cas if burns.
 Tella attno Parts No. werden night gellefert.

No.1

Ref. No.	Address	New	Parts No.	Description	Desti- Re- nation marks
参照者号	位置	Parts	* 4 * 4	部品名/規格	仕 肉 業等
		L	A - 522	(Japan made)	1
601	I.A	T	A01-1949-01	METALLIC CABINET	
602	2Ã	*	A60-0121-01	PANEL	
603	2A		803-2728-04	DRESSING PLATE	
604	2A 2A, 2B		B10-1855-03 B12-0160-04	FRONT GLASS	
605	2A, 2B		812-0161-04	INDICATOR	k :
-		*	B46-0092-13	WARRANTY CARD	
-		ļ	846-0094-03	WARRANTY CARD	Y
-			846-0095-03 846-0096-23	WARRANTY CARD	X
-			B46-0121-03	WARRANTY CARD (PRESET220-240)	P
-		1	858-0513-04	CAULTON CAMP	
-		*	B60-0671-00 B60-0672-00	INSTRUCTION MANUAL (ENGLISH) INSTRUCTION MANUAL (FRENCH)	P
-			B60-0676-00	INSTRUCTION MANUAL(SPANISH)	H
-	1	*	860-0677-00		H .
607	18	İ	E03-0115-05 E30-2592-15	AC PLUG ADAPTER AC POWER CORD	H I
608 608	10		E30-2594-15	AC POWER CORD	X
608	10		E30-2605-05 E30-2650-05	AC POWER CORD	KP
608	28		E31-4599-15	WIRING HARNESS	
610	2A, 2C		G11-2052-14	CUSHION	
1010			H10-5151-02	POLYSTYRENE FORMED FIXTURE	
1		1	H10-5152-02	POLYSTYRENE FORMED FIXTURE POLYSTYRENE FORMED BOARD	x
-			H11-0042-04 H25-0232-04	PROTECTION BAG (235X350X0.03)	1 1
1-	İ	1	H25-0397-04	PROTECTION BAG	
l.		*	H50-0189-04	ITEM CARTON CASE	KPYM
-		*	H50-0190-04	ITEM CARTON CASE	1
611	1A	1	J19-2815-04	ANTENNA HOLDER	
612	2B 1C		J19-3300-05 J19-3331-05	UNIT HOLDER	
614	ic	1	J42-0083-05 J61-0307-05	POWER CORD BUSHING	
			K29-3960-04	KNGB(BALANCE, MIC MIXING)	
615	2 A		K29-4173-02	KNOR(AI TIMER1.2 etc.)	
617	2A 2A		K29-4175-04 K29-4176-12	KNOB(N.B.CIRCUIT) KNOB ASSY(INPUT SELECTOR)	
618	2A	1	K29-4178-04	KNOB ASSY(VOLUME CONTROL)	
621	18			POWER TRANSFORMER	K
621	1B 1B	*		POWER TRANSFORMER POWER TRANSFORMER	YM
621 621 621	18			POWER TRANSFORMER	X
_		1	N29-0067-05	PUSH RIVET (3.5X4.5)	
A			N09-1445-05 N09-2782-05	SET SCREW (M3X8) TAPTITE SCREW (2.6X8)	
B		i	N86-4006-45	BINDING HEAD TAPTITE SCREW	
D			N87-3006-46	BRAZIER HEAD TAPTITE SCREW	
E	1	- 1	N89-3008-45	BINDING HEAD TAPTITE SCREW	1

K:USA P:Canada T:England E:Europe X:Australia M:Other Areas L'Scandinavia Y:PX(Far East, Hawaii) Y:AAFES(Europe)

⚠ indicates safety ortical components

Itea Parts
in this trout Parts No are not supplied.
Let all be normed tornes cars of Parts No respect cas founds.
To extre Parts No werder right gelefort.

	Ref. No.	Address	Now Parts	Parts No. 据品费号	Description 部品名/規模	nation	Ra- mark Mar
F				N89-3008-46	BINDING HEAD TAPTITE SCREW		
	23	1B 1B		T90-0173-05 T90-0176-05	LOSP ANTENNA T TYPE ANTENNA		Ĺ
6	24	18			(Singapore made)		
_	01 -	1A	-	A01-1978-01	METALLIC CABINET	1	Ī
	02	2Å		A60-0121-01	PANEL	1	
6	03	2A	1	B03-2728-04	DRESSING PLATE	ŀ	1
6	04	2A		B10-1855-03	FRONT GLASS INDICATOR	1	1
	05	2A, 2B	!	B12-0160-04 B12-0161-04	INDICATOR	í	1
l°.	06	12"	2	B46-0092-13	WARRANTY CARD	К	İ
_				B46-0094-03	WARRANTY CARD	Y	í
١-				846-0095-03	WARRANTY CARD	x	1
١-		i		846-0096-23 846-0121-03	WARRANTY CARD	P	1
-				858-0513-04	CAUTION CARD (PRESET220-240)	Y	1
Ĺ		1		860-0671-00	INSTRUCTION MANUAL (ENGLISH)		
			*	B60-0672-00	INSTRUCTION MANUAL (FRENCH)	P	1
-			*	B60-0676-00 B60-0677-00	INSTRUCTION MANUAL(SPANISH) INSTRUCTION MANUAL(CHINESE)	H	
ľ		1	1		AC PLUG ADAPTER	н	ļ
	07	1B 1C		E03-0115-05 E30-2592-15	AC POWER CORD	H.	
	08	10		E30-2594-15	AC POWER CORD	X	ĺ
	08	10		E30-2605-05	AC POWER CORD	KP	i.
١	08	10		E30-2650-05	/	1	1
1	09	2B		E31-4599-15	WIRING HARNESS		
1	10	2A,2C		G11-2052-14	CUSHION		
١.				H10-5188-12	POLYSTYRENE FOAMED FIXTURE	KPYM	
1		1	1.	H10-5189-02	POLYSTYRENE FORMED FIXTURE POLYSTYRENE FORMED FIXTURE	X	
Ľ		1	*	H10-5212-12 H10-5213-02	PALYSTYRENE FOAMED FIXTURE	X	
ľ		1		H25-0232-04	PROTECTION BAG (235X350X0.03)	!	
ı				H25-0397-04	PROTECTION BAG	KPYM	
١			*	H50-0193-04	ITEM CARTON CASE	X	1
1	-		1		ANTENNA HOLDER		
	611	1 A 2 B		J19-2815-04 J19-3300-05	UNIT HOLDER		
1	512 513	10		J19-3331-05	UNIT HOLDER	1	1
4	614	10		J42-0083-05 J61-0307-05	POWER CORD BUSHING	1	
١	-		1		KNOB (BALANCE, MIC MIXING)		
	615	2A 2A	1	K29-3960-04 K29-4173-02	KNOB(AI TIMER1, 2 etc.)		
	616 617	2A		X29-4175-04	KNOB(N.B.CIRCUIT)		ì
١	618	2A		K29-4176-12 K29-4178-04	KNOB ASSY(INPUT SELECTOR) KNOB ASSY(VOLUME CONTROL)		
1	619	2A				k	-
4	621	1B	*	L07-0326-05 L07-0327-05	POWER TRANSFORMER POWER TRANSFORMER	P	1
	621 621	18	*	L07-0327-05	POWER TRANSFORMER	YM	i
1	621	18	*	L07-0329-05	POWER TRANSFORMER	X	
1				N29-0067-05	PUSH RIVET (3.5X4.5)		
-1	A	1	- 1	N09-1445-05	SET SCREW (M3X8)	- 1	- 1

K:USA P.Canada T:England E:Europe X:Australia M:Other Areas L'Scandinavia Y:PX(Far East, Hawaii) Y:AAFES(Europe)

⚠ indicates safety critical component

No.4

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34

New Parts
Parts No. are not supplied
Les articles ran mortiones dans le Parts No. ne sont des founds

	Ref. No.	Address		Parts No.	Description	Destination tt 向	Re-
	参照書号	位置	Ħ	# 品 書 号	部 品 名/規 裕	T (m)	-
E				N09-2782-05	TAPTITE SCREW (2.6X8)		
(:	i		N86-4006-45	BINDING HEAD TAPTITE SCREW BRAZIER HEAD TAPTITE SCREW		
E)	1	1	N87-3006-46 N89-3008-45	RINDING HEAD TAPTITE SCREW		
E		-		N89-3008-46	BINDING HEAD TAPTITE SCREW		
4	523	1B 1B		T90-0174-05	LOGP ANTENNA T TYPE ANTENNA		
-	524	110	_	A - 522L			_
	501	1.4		A01-1949-01 A60-0122-01	METALLIC CABINET		
ľ	502	2 A	•				
	603	2A		B03-2728-04 B10-1855-03	PRESSING PLATE		
	604 605	2A 2A, 2B		B12-0160-04	INDICATOR		i
	606	2A		B12-0161-04	INDICATOR WARRANTY CARD	E	
ľ	-			B46-0122-13		T	
	-		ì	846-0143-13	WARRANTY CARD	1	
ŀ	-			B58-0923-14 B60-0671-00	INSTRUCTION HANUAL(ENGLISH)		3
				860-0672-00	INSTRUCTION MANUAL (FRENCH)	8	ì
	-		*	B60-0673-00	INSTRUCTION MANUAL (GERMAN)		į
l	-		*	860-0674-00 860-0675-00	INSTRUCTION MANUAL(DUTCH) INSTRUCTION MANUAL(ITALIAN)	E	
	•	i	*			E	
	608	1C		E30-2592-15 E30-2593-15	AC POWER CORD	T	
	608 609	2B		E31-4599-15	WIRING HARNESS		
١	610	2A, 2C		G11-2052-14	CUSHION		
l				H10-5151-02	POLYSTYRENE FORMED FIXTURE		
l	-		[H10-5152-02	POLYSTYRENE FOAMED FIXTURE		
ł	-		i	H11-0042-04 H25-0232-04	POLYSTYRENE FORMED BOARD PROTECTION BAG (235X350X0.03)	E	1
ĺ	-			H25-0397-04	PROTECTION BAG	E	
l			1	H25-0651-04	PROTECTION BAG (0232 PRINTED)	7	1
l	-		*	H25-0659-04	PROTECTION BAG (0397 PRINTED)	T	1
١	-	i	*	H50-0191-04	ITEM CARTON CASE		
۱	611	1 A		J19-2815-04	ANTENNA HOLDER	-	ĺ
	612	2B		J19-3300-05 J19-3331-05	UNIT HOLDER UNIT HOLDER		
ı	613	1C	1	J42-0063-05	POWER CORD BUSHING		1
l	-	1		J61-0307-05	WIRE BAND		
ł	615	2A		K29-3960-04	KNOB (BALANCE, HIC MIXING)		1
ł	616	2 A	1	K29-4173-02	KNOB(AI TIMER1,2 etc.) KNOB(N.B.CIRCUIT)		
١	617 618	2 A 2 A		K29-4175-04 K29-4176-12	KNOR ASSY(INPUT SELECTOR)		
١	619	2A		K29-4178-04	KNOB ASSY(VOLUME CONTROL)		1
l	621	18	*	L07-0329-05	POWER TRANSFORMER	T	
١	621	18		L07-0330-05	POWER TRANSFORMER	, c	
1		1		N29-0067-05	PUSH RIVET (3.5X4.5) SET SCREW (M3X8)		İ
١	A		1	N09-1445-05 N09-2782-05	TAPTITE SCREW (2.6X8)		Ĺ
I	B C	1		N86-4006-45	BINDING HEAD TAPTITE SCREW		i
1	D			N87-3006-46	BRAZIER HEAD TAPTITE SCREW	1	į

L:Scandinavia	K:USA	P:Canada
Y:PX(Far East, Hawar)	T:England	€:Europe
Y:AAFES(Europe)	X:Australia	McOther Areas

	dinavia lar East, Hawaki) EG(Europe)	1	CUSA f:England C:Australia	P:Canada E:Europe M:Other Areas		Singapore France m critical comp	ac)
615 616 617 618 619	2A 2A 2A 2A 2A 2A	*	K29-39 K29-41 K29-41 K29-41 K29-41	73-02 75-04 76-12 78-04	KNOB(BALANCE, MIC MIXING) KNOB(AI TIMERI, 2 etc.) KNOB(AI CIRCUIT) KNOB(A BASY(INPUT SELECTOR) KNOB ASSY(INPUT SELECTOR) KNOB ASSY(VOLUME CONTROL) POWER TRANSFORMER	Т	
611 612 613 614	1A 2B 1C 1C		J19-28 J19-33 J19-33 J42-00 J61-03	00-05 31-05 83-05	ANTENNA HOLDER UNIT HOLDER UNIT HOLDER POWER CORD BUSHING WIRE BAND		
-		*	H50-01	96-04	ITEM CARION CASE	EL	i I

k. Naw Parts
Parts without Parts No are not supplied.
Lod and lider orn manutonies dans le Parts No, ne aont pas fournis.
Tello omn Parts No, warden nicht gewefert
Parts No.

Ref. No.	Address 位 置	New Parts	Parts No.	Description 部品名/規格	Desti- nation 仕 向	G
F		-	N89-3008-45	BINDING HEAD TAPTITE SCREW		t
-			N89-3008-46	BINDING HEAD TAPTITE SCREW	-	ŀ
522	1B		T90-0136-05	ANTENNA ADAPTOR		l
623	18		T90-0173-05 T90-0176-05	LOOP ANTENNA T TYPE ANTENNA		1
624	110	L_	A - 522L (Singe	pore and France made)		
601	1A	Г	A01-1978-01	METALLIC CABINET		
602	2A	*	A60-0122-01	PANEL		-
603	2A		B03-2728-04	DRESSING PLATE		ł
604	2A 2B		B10-1855-03 B12-0160-04	INDICATOR	-	ļ
605 606	2A, 2B		B12-0161-04	INDICATOR	1	
-	-"		846-0122-13	WARRANTY CARD	EL	1
-			B46-0143-13	WARRANTY CARD	T	
-			B58-0923-14	CAUTION CARD INSTRUCTION MANUAL(ENGLISH)	TE	1
-	1	*	860-0671-00 860-0672-00	INSTRUCTION MANUAL (FRENCH)	E	į
-		:	860-0673-00	INSTRUCTION MANUAL (GERMAN)	E	ĺ
_		,	860-0674-00	INSTRUCTION MANUAL(DUTCH)	E	1
-		*	B60-0675-00	INSTRUCTION MANUAL(ITALIAN)	E	
-	1	*	860-0682-00	INSTRUCTION HANUAL(ENGLISH) INSTRUCTION HANUAL(FRENCH)	l'E	1
-	1	*	B60-0683-00 B60-0684-00	INSTRUCTION HANUAL (GERMAN)	L	1
_				INSTRUCTION MANUAL(DUTCH)	1,	1
-		*	B60-0685-00 B60-0686-00	INSTRUCTION MANUAL(ITALIAN)	Įĭ.	
608	10		E30-2592-15	AC POWER CORD	EL	
608 609	1C 1C 2B		E30-2593-15 E31-4599-15	AC POWER CORD	T	ĺ
610	2A, 2C		G11-2052-14	CUSHION		
			H10-5212-12	POLYSTYRENE FORMED FIXTURE	TEL	-
-		1	H10-5213-02	POLYSTYRENE FORMED FIXTURE	TEL	ı
-		*	H10-5241-02	POLYSTYRENE FOAMED FIXTURE	E	1
:		,	H1D-5242-02 H25-0232-04	PROTECTION BAG (235X350X0.03)	EL	
			H25-0397-04	PROTECTION BAG	EL	1
-	1		H25-0651-04	PROTECTION BAG (0232 PRINTED)	Ţ	1
-	1	*	H25-0659-04	PROTECTION BAG (0397 PRINTED) ITEM CARTON CASE	T E	1
1		*	H50-0192-04 H50-0195-04	ITEM CARTON CASE	Ť	1
-			H50-0196-04	ITEM CARTON CASE	EL	
611	14		J19-2815-04	ANTENNA HOLDER		1
612	2B		J19-3300-05	UNIT HOLDER	1	1
613	1C		J19-3331-05 J42-0083-05	UNIT HOLDER POWER CORD BUSHING	1	
614	110		J61-0307-05	WIRE BAND		
615	2A	1	K29-3960-04	KNOB(BALANCE, MIC MIXING)		
616	2A		K29-4173-02	KNOB(AI TIMER1,2 etc.) KNOB(N.B.CIRCUIT)	1	
617	2 A 2 A	ĺ	K29-4175-04 K29-4176-12	KNOB ASSY(INPUT SELECTOR)		
619	2 A		K29-4178-04	KNOB ASSY (VOLUME CONTROL)	i	2000
621	18		L07-0329-05	POWER TRANSFORMER	T	1
621	18	*	L07-0329-05	POWER TRANSFORMER	T	

No.6

r New Parts
Parts No. are not supplied,
Les articles non mentionnes dans le Parts No. ne sont pas fournis

Ref. No. 多無事号	Address 位 置	Now Parts If	Part # A	s No.	* 4	Description 基名/規	*	Desti- nation 仕 南	Re- mark: 角考
21	1B		L07-033	0-05	POWER TRANSF	BRHER		EL	
			N29-D06	7-05	PUSH RIVET	(3,5X4	1.5)		
	1		N09-144		SET SCREW	(M3XB)		1	İ
3	1		N09-278		TAPTITE SCRE			1	
	1		N86-400		BINDING HEAD BRAZIER HEAD			-	
,	1	}	NO 7-3001	-40					1
			N89-300		BINDING HEAD			i	1
			N89-300	9-46	BINDING HEAD	TAPTITE	SCREW		ļ
22	18		T90-013	L-05	ANTENNA ADAP	TOP			
23	18		T90-017		LOUP ANTENNA			1	
24	18	l!	T90-017		T TYPE ANTEN				
			TUN	ER UNIT	005 - 4120	- 10)			
201,202	T		B30-101		LED(SLP-281F				1
203	ł		830-101		LED(SLP-981C				i
204			B30-1010		LED(SLP-281F				1
203-211	ı		550-101	05	2001301 7010				1
1 -4			CK45FF1		CERAMIC	0.010UF	Z	1	
5			CEOAKWI		ELECTR9	47UF	16WV		
8 ,7	1		CK45FF1		CERAMIC ELECTRO	0.010UF 0.47UF	Z SONV		
9	1		CC45FSL		CERAMIC	100PF	J	1	l
. ,			00401.52		Committee		•		
:10	1		CEO4KW1		ELECTRO	2.2UF	50WV	i	1
11		1	CE04KW1		ELECTR6	3.3UF 0.010UF	50WV Z	1	
12	1		CK45FF11		CERAMIC MYLAR	0.015UF	Ĵ		1
14 , 15		1	CK45FF1		CERAMIC	0.022UF	ž		į.
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1					-		
16		i	CE04KW1		ELECTR6	4.7UF	35WV	1	
17			CK45FF1		CERAMIC	0.022UF 10UF	2 35WV		
18			CEO4KW1		CERAMIC	0.022UF	7.		
20			CE04KW1		ELECTRO	10UF	35WV		
							14181		
21			CEO4KW1		ELECTRO	100UF 470PF	16WV K		
22		1	CK45FB1		HF	0.047UF	Ĵ		}
23		1	CC93FCH		CERAMIC	470PF	3		1
25 , 26	1	1	CC45FSL		CERAMIC	150PF	J	KPYHX	1

MYLAR MYLAR MYLAR MYLAR MYLAR ELECTRO CERAMIC ELECTRO ELECTRO ELECTRO ELECTRO

CERAMIC CERAMIC CERAMIC CERAMIC MYLAR

ELECTRO ELECTRO

1000PF 0.012UF 0.022UF 4700PF 1.0UF

1.0UF 504 2.2UF 504 0.010UF Z 0.47UF 50W 3.3UF 50W 2.2UF 50W 220PF J 22PF J 470PF K 0.010UF Z 0.022UF J SOWV Z SOWV SOWV SOWV

50¥V 16¥V

1.0UF 47UF

R:USA P:Canada T:England E:Europe X:Australia M:Other Areas L:Scandinavia Y:PX(Far East. Y:AAFES(Europe)

CEO4KW1H010M
CEO4KW1H2R2M
CK45FF1H103Z
CEO4KW1HR47M
CEO4KW1H3R3M
CC04KW1H3R3M
CC45FSL1H221J
CC45FCH1H220J
CK45FB1H471K
CK45FF1H471K
CK45FF1H103Z
CQ92FM1H223J

CED4KW1H010M CED4KW1C470M

TEL YMX KP TEL KPYMX

TEL

TEL

w New Parts
Parts No are not supplied.
Les articles non mentionnes dans le Parts No, ne sont pas fournis.
Tele o'nne Parts No, werden nicht geliefert.

Ref. No.		New	Parts			Description		Desti- nation	
多無事号	位置		# 1	* *		品 名/規	*	仕 陶	**
C51 C52 C53 ,54 C55			CEO4KW1A4 CEO4KW1A4 CEO4KW1C	70M 220M	ELECTRO ELECTRO ELECTRO CERAMIC	1.0UF 47UF 22UF 0.010UF	50WV 10WV 16WV Z	TEL	
C56			CC45FSL1		CERAMIC	22PF	Ĵ		
C106 C107 C108			CEO4KW1C4 CK45FF1H2 CK45FF1H2	223Z	CERAMIC CERAMIC	47UF 0.022UF 0.022UF	16WV Z Z	TEL	
C109,110 C111-113			C91-0085		CERAMIC	0.022UF 0.022UF	N Z	TEL	
C114 C135,136			C91-0085 CQ92FN1H	752J	CERAMIC MYLAR	0.022UF 7500PF	J.	TEL	
C170 C171 C201,202			CC45FSL1F CC45FSL1F CC45FCH1F	1101J	CERAMIC CERAMIC CERAMIC	47PF 100PF 33PF]]	TEL TEL	
C203 C204, 205 C206			CE04DW1A1 C91-0769 CE04CW1V2	-0\$	ELECTRO CERAMIC ELECTRO	100UF 0.01UF 2.2UF	10WV K 35WV		
C209 C210			CE04DW1H0	110M	ELECTRO CERAMIC	1.0UF 0.01UF	SOWV		
C211			CK45FF1H	103Z	CERAMIC	0.010UF	z		
J1 J1 J3	1C 1C 2A		E20-0321 E20-0476 E11-0200	-05	LOCK TERMI	NAL BBARD(A NAL BBARD(A PHONE JACK(NTENNA)	TEL KPYMX	
CF1 ,2 CF1 ,2 CF3 L1 L2			L72-0531 L72-0536 L72-0096 L30-0488 L30-0439	-05 -05 -05	CERAMIC FI CERAMIC FI CERAMIC FI AM IFT FM IFT	LTER		KPYMX TEL	
L3 L5 L6 ,7			L40-1021 L79-0125 L79-0790 L40-1091	-05 -05 -17	LC FILTER LC FILTER SMALL FIXE	D INDUCTOR		TEL TEL TEL	
L104			L39-0189	-05	COMBINATIO			KPYHX	
L104 L105 L106 X1 X201			L39-0195 L39-0192 L40-1091 L77-1122 L77-1176	-05 -17 -05	CRYSTAL RE		MHz)	TEL TEL	
F			N89-3008	-46	BINDING HE	AD TAPTITE	SCREW		ļ
CP201 CP202 CP203,204 CP205 CP206			R90-0855 R90-0878 R90-0482 R90-0824 R90-0482	-05 -05 -05	MULTI-COMP MULTIPLE R MULTI-COMP MULTI-COMP MULTI-COMP	100KX5 ESISTOR 100KX4 4.7KX6 100KX4	J J 1/6W J 1/6W		
R53 VR1 VR2 VR3 VR4			RS14KB3D R12-3687 R12-1619 R12-3685 R12-5652	-05 -05 -05	TRIMMING P		-LEVEL)	TEL	
S1 -39 S101	1A 1C		S40-1064 S31-2132		PUSH SWITC SLIDE SWIT	H CH(VOLTAGE	SELECTOR)	ΥМ	

K:USA T:England X:Australia L'Scandinavia Y:PX(Far East, Har Y:AAFES(Europe) P:Canada E:Europe M:Other Areas

38

35

C25 , 26 C27 , 28 C27 , 28 C27 , 28 C27 , 28 C29 , 30 C31 C32 C32 C34

C40 C41 .42 C43 -45 C46 ,47

C49 C50

New Parts
 Torro without Parts No. are n

	Address Ne	Parts No.	Description	Desti- Re-
Ref. No.	Par	ts.	超品名/境格	nation mark 仕 向 備考
# # # 9 D20 .21 D22 D22 D23 D23	位置	1SR139-100 HZS6.2M(B2) RD6.2ES(B2) HZS11M(B2) RD11ES(B2)	DIGDE ZENER DIGDE ZENER DIGDE ZENER DIGDE ZENER DIGDE ZENER DIGDE	
D24 D24 D25 D25 D26		HZS16N(82) RD16ES(82) HSS1D4 1SS133 HZS6.8N(82)	ZENER DIODE ZENER DIODE DIODE DIODE ZENER DIODE	
D26 D28 D28 D30 -38 D30 -38		RD6.BES(B2) HZS4.7N(B) RD4.7ES(B) HSS104 1SS133	ZENER DIODE ZENER DIODE ZENER DIODE DIODE DIODE	
D39 ,40 D39 ,40 D41 -50 D41 -50 D53		S5688B 15R139-100 HSS104 15S133 HZS4.7N(B)	DIODE DIODE DIODE DIODE ZENER DIODE	
D53 D55 -50 D55 -50 D121-124 D121-124		RD4.7ES(B) HSS104 1SS133 S568BB 1SR139-100	ZENER DIODE DIODE DIODE DIODE DIODE	
IC1 IC1 IC2 IC3 IC3		NJM4565D-D RC4565D-B TA8409S BA17815T TA7815HF	IC(OP AMP X2) IC(OP AMP X2) IC(MOTOR CONTROL) IC(VOLTAGE REGULATOR) +15V) IC(VOLTAGE REGULATOR) +15V)	
IC3 IC4 IC6 IC6 IC8		UPC7815HF PST529C NJM4565D-D RC4565D-D NJM4565D-D	IC(VOLTAGE REGULATOR/ +15V) IC(SYSTEM RESET) IC(OP AMP X2) IC(OP AMP X2) IC(OP AMP X2)	
IC8 Q1 -6 Q7 -10 Q11 ,12 Q13 ,14		RC4565D-D 2SA992(F,E) 2SC1845(F,E) 2SC4137(V,W) 2SD2340	IC(OP AMP X2) TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
Q15 ,16 Q17 ,18 Q19 Q20 ,21 Q22		2581531 25C1845(F,E) 25A1123(R,S) 25C1845(F,E) 25C1740S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	
922 923 923 927 928		2SC3311A(Q,R) 2SC1740S(Q,R) 2SC3311A(Q,R) 2SA954(L,K) 2SC1740S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	YMXTEL
928 929 930 931 931		2SC3311A(Q,R) 2SD1266(Q,P) 2SB764 2SA1309A(Q,R) 2SA933S(Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	

L:Scandinavia K:USA
Y:PX(Far East, Hawaii) T:England P:Canada E:Europe

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Ref. N	lo. Add	iress P	ien w te	Parts No.	Description	Desti- nation	Re-
多無有	号位	=	Ħ	# 品 書 号	部 品 名/規 格	住 向	
932 ,3	3			25C2878(B)	TRANSISTOR		
935 936				2SC2878(B) 2SA1309A(Q,R)	TRANSISTOR TRANSISTOR		
936 937 -4	.			25A9335(Q,R) 25C17405(Q,R)	TRANSISTOR TRANSISTOR		
	- 1			2SC3311A(Q,R)	TRANSISTOR		
937 -41 941 -4 941 -4				DTC124ES	DIGITAL TRANSISTOR		
041 -4	•			UN4212	TRANSISTOR		
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L:Scandinavia K:USA
Y:PX(Far East, Hawaii) T:England
Y:AAFES(Europe) X:Australia

P:Canada E:Europe M:Other Are

No.8

Ref. No.	Address	New	Parts	No.	Description		Re-
* # # 4	位 重	Perts #	# A	• +	据 品 名/境 格		24
1 ,2 1 ,2 3 3 4 ,5			HSS104 1SS133 HZS5.1N(E RD5.1ES(E HSS104		DIGDE DIGDE ZENER DIGDE ZENER DIGDE DIGDE		
4 ,5 109,110 109,110 111,112 111,112			155133 HSS104 1SS133 HSS104 1SS133		DIODE DIODE DIODE DIODE DIODE	TEL TEL	
113-116 113-116 120 120 212			HSS104 155133 HZS3.3N(E RD3.3ES(E HSS104	32) 32)	DIODE DIODE ZENER DIODE ZENER DIODE DIODE	TEL TEL	
212 212-214 212-214 212-215 212-215			1SS133 HSS104 1SS133 HSS104 1SS133		DIODE DIODE DIODE DIODE DIODE	KPYM X X Tel Tel	
214 214 216-227 216-227 217-227			HSS104 1SS133 HSS104 1SS133 HSS104		DIODE DIODE DIODE DIODE DIODE	KPXTEL YM YM YM	
217-227 231-234 231-234 D201 C1	18		155133 HSS104 155133 FIP11AM7F LA1265	4	DIGDE DIGDE DIGDE FLUGRESCENT INDICATOR TUBE IC(FM/AM TUNER)	KPXTEL	
C2 C3 C201 C202			AN7470 LM7001 CXP50116- MSM59371 2SC1923(F		IC(FM MPX) IC(PLL FREQUENCY SYNTHESIZER) IC(MICROPROCESSOR) IC(EXPANSION IC) TRANSISTOR		
92 13 13 14 14			2SC1845(8 2SC1740S 2SC3311A 2SC1740S 2SC3311A	(Q,R) (Q,R) (Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	TEL TEL	
95 95 9102 9102 9103			2SK163(L 2SK364(G) 2SA1309A 2SA933S(C) 2SA1309A	R,BL) (Q,R) Q,R)	FET FET TRANSISTOR TRANSISTOR TRANSISTOR	TEL TEL	
2103 2104 2104 2105,106			2SA933S(0 2SA1309A 2SA933S(0 2SC1740S) 2SC3311A	(Q,R) Q,R) (Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	TEL TEL	
0107,108 0107,108 0109,110 0111			2SC1740S 2SC3311A 2SD1302(2SA1309A 2SA933S((Q,R) S,T) (Q,R)	TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR TRANSISTOR	YM	

L:Scandinavia	K:USA	P:Canada
Y:PX(Far East, Hawaii)	T:England	E Europe
Y:AAFES(Europe)	X:Australia	McOther Areas

Δ	indicates	salety	critical	components.

Ref. No.	Address		Parts No.	De	scription			Re-
* # * *	位 置	Parts		* 4	名/規	**		#4
9201,202		1-	25C17405(Q,R)	TRANSISTOR				
9201,202	i	1	25C3311A(Q,R)	TRANSISTOR				
9203	1	1	25A1309A(Q,R)	TRANSISTOR			YM	
9203	1		2SA9335(Q,R)	TRANSISTOR			YM	
A1	1.8		W02-1046-05	ELECTRIC CIRC		LE		
DT1	1C	1	WD2-1041-05	FM FRONT-END			TEL	
DT1	10	L	W02-1042-05	FM FRONT-END			KPYMX	
		_	AUDIO UNIT	(X09 - 3480 -		FOUR	1	_
C3 ,4		1	CEO4KW1H01DM	ELECTRO CERAMIC	1.0UF 100PF	50WV		
C5 ,6 C7 .8	1		CC45FSL1H1D1J CE04KW1V100M	ELECTRO	LOUP	35 WV		
C7 .8 C11 ,12	i		CF92FV1H243J	MF	0.024UF	J	1	i
C13 ,14			CF92FV1H104J	MF	0.10UF	j		
			CC45FSL1H101J	CERANIC	100PF	,		
C15 .16	1		CF92FV1H104J	ME	0.10UF	3	1	
C17 .18 C19 ,20		1	CC45FSL1H101J	CERAMIC	100PF	ĭ		
C21 ,22	1	1	CK45FB1H471K	CERAMIC	470PF	ĸ		
C23 ,24	1		C90-1851-05	ELECTRO	100UF	16WV		
C25 ,26	1		CC45FSL1H101J	CERAMIC	100PF	J	EL	
C25 .26	1		CC45FSL1H181J	CERANIC	180PF	j	KPYMXT	
C27 .28	i	1	CC45FSL1H220J	CERAMIC	22PF	J		
C29 ,30	1	1	CC45FSL1H101J	CERAMIC	100PF	j	1	
C31 .32			CC45FSL1H221J	CERAMIC	220PF	J	-	
C33 ,34	1		CED4KW1V100M	ELECTRO	1 OUF	35WV		
C35 ,36		1	CC45FSL1H101J	CERAMIC	100PF	J	EL	ĺ
C35 ,36	1		CC45FSL1H820J	CERAMIC	82PF	J	KPYMXT	
C37 ,38			CEO4KW1C220M	ELECTRO	22UF	1689	ł	
C39		1	CK45FF1H103Z	CERAMIC	0.010UF	2		
C40			CED4KW1H221M	ELECTRO	220UF	SOWV		
C41			CEO4KW1H470M	ELECTRO	47UF	50WV	ì	
C42	1	1	CK45FF1H103Z	CERAMIC	0.010UF	Z		
C43 ,44	1	1	CF92FV1H224J	MF	0.22UF	J	EL	
C43 ,44		1	CF92FV1H473J	MF	0.047UF	J	KPYMXT	
C45 ,46		1	CF92FV1H224J	MF	0.22UF	J	EL	
C47	1	1	CEO4KW1H4R7H	ELECTRO	4.7UF	SOWV	{	
C48	1	1	CE04KW1H010M	ELECTRO	1.0UF	50WV		
C49	1	1	CEG4KW1A1C1M	ELECTRO	100UF	10WV		
C53 ,54	1		CK45FF1H103Z	CERAMIC	0.010UF	Z	EL	
C55 ,56			CK45FF1H103Z	CERAMIC	0.010UF	2		
C57 ,58	i	1	C90-1947-05	ELECTRO	5600UF	50WV	1	1
C60 .61		1	CK45FFIH103Z	CERAMIC	0.010UF	Z		
C67 ,68			CEO4KW1V102M	ELECTRO	1000UF	35WV		
C70			CEO4KW1C470M	ELECTRO	47UF	16WV		
C71 .72		1	CF92FV1H104J	MF	0.10UF	J		
C73 ,74	1	1	CEO4KW1C470M	ELECTRO	47UF	16WV		
C75	1	1	CEO4KW1E101#	ELECTRO	100UF 47UF	25WV 35WV		
C76 C77			CEO4KW1V470M CEO4KW1E471M	ELECTRS	470UF	25WV		
	1				1045	35¥V		
C79		1	CEO4KW1V100M	ELECTRO	10UF 47UF	35WV		
C80	1	1	CED4KW1V470M CED4KW1V100M	ELECTRO	10UF	35WV		
CB1	1	1	CEO4KWOJ222M	ELECTRO	2200UF	6.3WV		
C82 C83		1	CED4KW1H2R2M	ELECTRO	2.2UF	SOWV		
		1						
CB4		1	CF92FV1H1D4J	MF	0.10UF	J		

L:Scandinavia	K:USA	P:Canada		
Y:PX(Far East, Hawaii)	T:England	£:Europe		
Y:AAFES(Europe)	X:Australia	MtOther Areas		

No.10

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Ref. No.	Address	New	Parts No.		Description		Desti- nation	Re-
参照 委号	位 軍	-	* 4 * 9		4 七/規	*	姓 南	備考
C86			CE04KWIV100H	ELECTR®	10UF	35WV		
C87			C91-1421-05	FILM	0.01UF	250AC		
C88			CEO4KW1C470M	ELECTRO	47UF	16WV	1	1
C89 C90 ,91			CE04KW1H010M CK45FF1H103Z	CERAMIC	1.0UF 0.010UF	50WV Z	1	
C95			CEO4KW1H010H	ELECTRO	1. OUF	50WV		
C96			CEO4KW1C330H	ELECTRO	33UF	16WV	i	ì
C97	1	1	CC45FSL1H101J	CERAMIC	100PF	J	1	1
098		1	CED4KW1A101M	ELECTRO	100UF	LOWV	1	1
C100,101			CEC4KW1V100M	ELECTRO	10UF	35WV		
C102			CF92FV1H1D4J	MF	0.10UF	J		
C103,104	l .		CF92FV1H154J	MF	0.15UF	J	1	
C105		1 1	CK45FF1H472Z	CERAMIC	4700PF	Z	1	1
C106			CC45FSL1H221J	CERAMIC	220PF	J	1	
C107			CF92FV1H473J	HF	0.047UF	J		1
C108			CC45FSL1H221J	CERAMIC	220PF	J		l
C109	l .	1 1	CE04JW1C100M	ELECTRO	10UF	16WV		ı
C110			CK45FB1H102K	CERAMIC	1000PF	K		ĺ
C111	J		CE04JW1C100M	ELECTR8	10UF	16WV		l
C112	l		CEO4JW1V100M	ELECTRE	10UF	35WV		
C113			CE04JW1HOR1H	ELECTRO	0.1UF	50WV		
C114	1	1	CE04JW1H4R7M	ELECTRO	4.7UF	50WV	1	t
C115		1	CE04JW1C100M	ELECTRO	10UF	16WV	1	1
C116 C117	İ		CE04JW1H010H CK45FF1H472Z	ELECTRO CERAMIC	1.0UF 4700PF	50WV 2		
			CK45FF1H103Z	CERAMIC	0.010UF	Z		
C118		1	CK45FF1H103Z	CERANIC	0.010UF	ž	1	
C120 C124,125		1	CEO4KW1C470M	ELECTRO	47UF	16WV		l
C128,129	i I	1	CC45FSL1H121J	CERAMIC	120PF	j	i	
C130			CK45FF1H103Z	CERAMIC	0.010UF	Z	EL	
C133			CX45FF1H103Z	CERAMIC	0.010UF	Z		
C134		i I	CE04KW1H010M	ELECTRO	1.0UF	50WV	1	
J1	1C		E08-1508-05	RECTANGULAR				
J3	1C 1C	ł I	E20-0459-05	PHONG JACK(S	L BOARDIE	DEAVEDE)	YMXTEL	
J4	10	1 1	E63-0027-05 E63-0017-05	PHONG JACK (S	HDED HOSE	ED)	INVIEL	
J5 J8	2C		E11-0220-05	MINIATURE PH				
F1		ΙÍ	FQ5-1623-05	FUSE (SEMKO)	(250V	T1.6A)	YH	
Fi	1 1	ΙI	F05-4028-05	FUSE (UL)	(125V	4A)	KP .	
F2		ΙI	F05-1623-05	FUSE (SEMK®)	(250V	T1.6A)	YHXTEL	
F3 -5	l i	1 1	F53-0006-05	FUSE	(125V	24)	KP	
F3 -5		Ιl	F53-0042-05	FUSE (SEHKO)	(250V	T2A)	YHXTEL	
F6			F53-0010-05	FUSE	(125V		KP	
F6			F53-0044-05	FUSE(SEMK®)	(250V	1487	YMXTEL	
CN18,19 CN20,21			J13-0075-05 J13-0075-05	FUSE CLIP			KPYM	
11 .2 Ti	18		L39-0085-05 L07-0332-05	PHASE-COMPEN		16	KP	
Ťi	18		L07-0333-05	POWER TRANSF			XT	
Ťi	18		L07-0334-05	POWER TRANSF			EL	
fi	18		L07-0335-05	POWER TRANSF			YM	
F			N89-3008-46	BINDING HEAD	TAPTITE	SCREW	1 1	
				TAPPING SCRE			1 1	

L:Scandinavia	K:USA	P:Canada
Y:PX(Far East, Hawaii)	T:England	£:Europe
Y:AAFES(Europe)	X:Australia	McOther Are

	Ref. No.	Address	New	Parts No.	Description	Desti-in- nation arks 仕 肉蜂
	参照者号	位屋	-	# 2 # 9	部 品 名/現 格	仕 向 特等
	н			N35-3008-46	BINDING HEAD MACHIN SCREW	
	CP1 ,2 R25 ,26 R27 -30 R31 ,32 R33 ,34			R90-0187-05 RN148K2C1960F RN148K2C1472F RD14NB2E151J RD14NB2E222J	MULTI-COMP 0.22X2 K 5W RN 196.0 F 1/6W RN 14.7K F 1/6W RD 150 J 1/4W RD 2.2K J 1/4W	
	R35 ,36 R37 ,38 R47 -50 R51 R52			R014NB2E181J R014NB2E151J R014NB2E4R7J R014NB2E221J R014NB2E101J	RD 180 J 1/4W RD 150 J 1/4W RD 4.7 J 1/4W RD 220 J 1/4W RD 100 J 1/4W	
	R59 ,60 R59 ,60 R63 ,64 R73 R87			RS14KB3D100J RS14KB3D4R7J RS14KB3A561J RD14NB2E1R0J RD14NB2E1R0J	FL-PROSF RS 10 J 2W FL-PROSF RS 4.7 J 2W FL-PROSF RS 560 J 1W RD 1.0 J 1/4W RD 1.0 J 1/4W	KPYMXT EL
Δ	R88 R89 R91 R92 R134			RD14NB2E4R7J RS14KB3D331J RS14KB3D121J RS14KB3A470J R92-0173-05	R0 4.7 J 1/4W FL-PR00F RS 33D J 2W FL-PR00F RS 120 J 2W FL-PR00F RS 47 J 1W RC 2.2M H 1/2W	KP
	R147,148 R150,151 R175 VR1 VR2	2C 2C	*	RD14NB2E221J RD14NB2E471J RS14KB3D331J R29-5060-05 R11-9021-05	RD 220 J 1/4W RD 470 J 1/4W FL-PROOF RS 330 J 2W POTENTIONETER (VOLUME CONTROL) POTENTIONETER (N.B.CIRCUIT)	
	VR3 VR4	2C 2C	*	R05-5046-05 R10-5044-05	POTENTIOMETER(BALANCE) POTENTIOMETER(MIC MIXING)	
	K1 K1 K2 K2			S51-2078-D5 S51-2092-05 S76-0005-05 S51-2078-05 S51-2092-05	MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY MAGNETIC RELAY	YMXTEL YMXTEL
A	K2 K4 S1			S76-0005-05 S76-0002-05 S31-3010-05	MAGNETIC RELAY MAGNETIC RELAY SLIDE SWITCH(VOLTAGE SELECTOR)	YMXTEL YM
	D1 -4 D1 -4 D5 D5 D6			HSS104A 1SS131 HZS5.1N(B2) RD5.1ES(B2) HSS104A	DIODE DIODE ZENER DIODE ZENER DIODE DIODE	
	D6 D9 D9 D10 D10			155131 H55104A 155131 H55104A 155131	DIODE DIODE DIODE DIODE	YMXTEL YMXTEL
A	D12 D12 D16 D16 D17 -19			D5SBA20F03 RBV-602LFA HZS16N(B2) RD16ES(B2) HSS104A	DIODE DIODE ZEMER DIODE ZEMER DIODE DIODE	
	D17 -19 D20 ,21			1SS131 S5688B	DIODE DIODE	

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L:Scandinavia	K:USA	P:Canada
Y:PX(Far East, Hawaii)	T:England	E:Europe
V-AAFFS/Figures	¥-Australia	M-Other Areas